

Presque Isle Light Station

Off SR 405, at the north end of Grand Lake Road

Presque Isle

Presque Isle County

Michigan

HAER No. MI-30

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Mid-Atlantic Regional Office
National Park Service
U.S. Department of the Interior
Philadelphia, Pennsylvania 19106

HISTORIC AMERICAN ENGINEERING RECORD

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Location: Off SR 405, at the north end of Grand Lake Road, on the Presque Isle Harbor Peninsula, in the town of Presque Isle, the county of Presque Isle, in the 11th Congressional District of Michigan.

UTM: Zone - 17 Easting - 304980 Northing - 5075760
Quad: Presque Isle

Date of Construction: 1870

Present Owner: U.S. Coast Guard
U.S. Department of Transportation
400 Seventh St., NW
Washington, DC 20590

Present Use: Aid to Navigation

Significance: The significance of the Presque Isle Light Station stems from two sources. First, it played a role in the expansion of shipping and passenger travel on the Great Lakes and the subsequent development of the northern counties of Michigan's Lower Peninsula. The light is associated with events that made a significant contribution to the broad patterns of Michigan's history. Second, the light tower is an example of functional architecture associated with safe travel along Michigan's coastline. The light embodies the distinctive characteristics of a type and period of construction important to the state's architectural heritage.

Project Information Statement: This document was undertaken in April 1988, in accordance with the Memorandum of Agreement among the Advisory Council for Historic Preservation, the U.S. Coast Guard and the Michigan State Historic Preservation Office, as a mitigative measure prior to the repair of the light tower. Project requiring mitigative procedures consists of removing the exterior wythie of painted red brick, which is heavily spalled, from the light tower and replacing it with a white brick cavity wall.

J. C. Malmrose LCDR, Supervisor
Shore Maintenance Detachment
U.S. Coast Guard
1240 E. Ninth Street
Cleveland, Ohio 44199-2060

The Structure

The Presque Isle Light Station complex is composed of three historic buildings and one contemporary structure located on the Presque Isle Harbor Peninsula in Presque Isle County, Michigan. The light tower is the most significant element of the complex and stand centered in the 99-acre lighthouse reserve, built in 1870. It is a conical brick structure measuring 113 feet in height from the base to the ventilator ball of the lantern, approximately 21 feet in diameter at the base, and 12 feet in diameter at the head. The walls at the base are 5.5 feet thick and are composed of a 2-foot outer wall, a 2.5-foot air space, and an inside wall that is 12 inches thick. At the parapet, the walls are approximately 5 feet thick and are composed of a 16-inch outer wall, a 4-inch air space, and an inner wall that is 8 inches thick. The entire structure rests on a limestone foundation extending more than 9.5 feet below ground level. The light tower stands 24 feet above water level with the lantern's focal plane set at 129 feet.

Exterior detailing of the white-painted light tower is limited to an entry door in a simple wood enframement at the base and eight windows, four in trabeated enframements staggered on the brick shaft and four in rounded enframements balanced around the crown. The crown displays two brick ribbon courses below its band of windows and a cracked iron cornice line that supports an iron gallery located six feet below the lantern. The spiral iron stairway with simple pipe railings and treads presents 138 steps and six landings. A wood doorway in the watch room at the top opens onto the iron gallery seen from the outside.

The light in the tower originally was fixed white with a French-made order Fresnel lens ground by Henry Lepaute that produced a light visible for eighteen to nineteen statute miles. The U.S. Coast Guard automated the light tower in 1970 and continues to operate it today. The light utilizes the original lens, although a 1000-watt lamp with 40,000 candlepower and a 360 degree arc of visibility has increased its operational range to twenty miles. The light also utilizes the original polygonal lantern measuring eight feet in diameter with ten rectangular glass panes two-and-one-half by six feet in size.

A passageway, measuring 16 feet in length, connects the light tower to a keeper's dwelling built in 1870. The house is a two-story brick building, measuring 31x31 feet in size, with a full basement, an ell, and a slate-covered gable roof.

An unattached keeper's dwelling stands directly southeast of the light tower and its attached residence. This home, built in 1905, is a two-story, rough-faced, concrete block building, measuring 35x27 feet in size, with a full basement and gambrel roof.

The fourth and last building of the station complex is a single-story, concrete block structure, built in 1960. Measuring 24x65 feet in size, the building serves as an automobile storage area, as a workshop for the complex, as an office, and as a visitors' reception facility.

The History

In 1840, the U.S. Lighthouse Board constructed a small lighthouse at the base of the Presque Isle Harbor Peninsula to guide ships safely into the nearby harbor of refuge. However, with the growth of shipping on the Great Lakes, and passenger travel, ships required more than just a harbor light to guide them safely along its coastline. Thus, in 1868, the Lighthouse Board recommended construction of the Presque Isle Light Station, one mile north of the old lighthouse at an important navigation point for the north and southbound shipping lanes through the Straits of Mackinac. The Board acquired from the public domain a land reserve at the head of the Presque Isle Harbor Peninsula for lighthouse purposes and submitted a request for Congressional appropriation. On July 15, 1870, the United States Congress appropriated \$28,000 for development of a coastal light facility at Presque Isle and, later, an additional \$6,000 for construction of the first keeper's dwelling.

Engineer O. M. Poe began work on the new coast line shortly after the release of funds in 1870. Due to the short construction season on the Great Lakes, and to the complexities of lighthouse construction, members of the Lighthouse Board did not believe that the facility could be completed before the end of 1870. After the tender WARRINGTON delivered materials for the building, work on the light station was "unexpectedly completed" before the arrival of winter. The Board transmitted notice to mariners of the light's establishment and lit the lantern for the first time at the opening of the 1871 navigation season.

On March 2, 1889, the Lighthouse Board received an appropriation of \$5,500 for a steam fog signal. Arriving on the steam barge RUBY in June 1890, the apparatus was in place at the head of the peninsula and functioning by the end of the shipping season.

The maintenance schedule for the steam fog signal required the services of an assistant keeper. The Lighthouse Board received an appropriation of \$5,000 for a second dwelling. Work on the second house began in April 1904 and was completed by September 1905. In 1906, the Board converted the first keeper's dwelling into two apartments for the assistant keeper and staff, and made the new house the main residence for the complex.

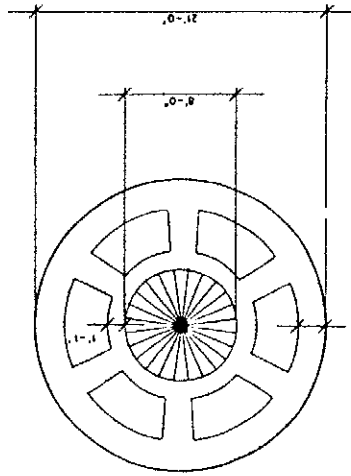
The Presque Isle Light Station received electrical and plumbing systems in the 1940s. By the 1950s, several of the light station's buildings had deteriorated or lost their original functions. The Coast Guard demolished all but the light tower and the two keepers' residences over the next ten years. The light was automated in the early 1970s, eliminating the need to have a keeper in residence.

Today, the U.S. Coast Guard owns and maintains the Presque Isle Light Station and releases the remainder of the complex to Presque Isle Township as a public park and recreation area. The township employs a live-in caretaker, who maintains the facilities and grounds. The three historic buildings, which served as the focal points for the light station, remain in their traditional environment and serve as reminders of the area's role in the development of travel and shipping on the Great Lakes.

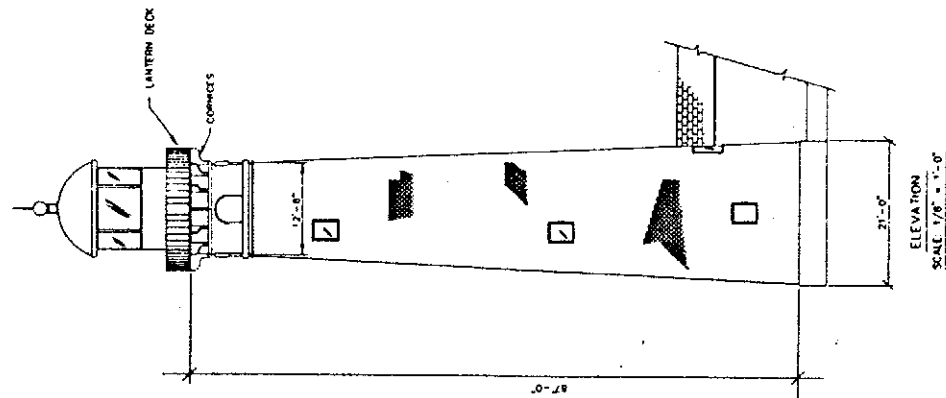
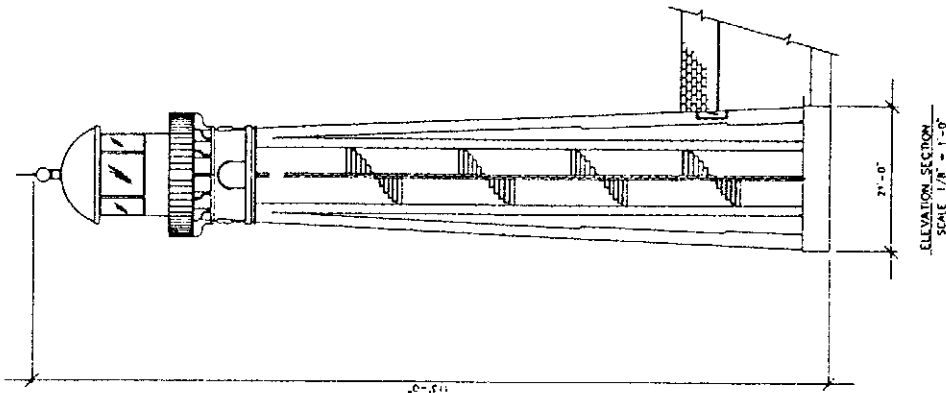
Bibliography

1. Holland, Francis. America's Lighthouses: Their Illustrated History Since 1716. Brattleboro, Vermont: The Stephen Green Press, 1972.
2. National Archives. Record Group 26, Michigan #87.
3. U.S. Coast Guard, Case Files, Washington, DC.
4. U.S. Lighthouse Board; U.S. Bureau of Lighthouses: U.S. Coast Guard. Light List. Various titles and dates.

Presque Isle Light Station
HAER No. MI-30 (page 5)



REFERENCE ONLY



U.S. COAST GUARD CLEVELAND, OHIO SHORE MAINTENANCE DETACHMENT		PRESQUE ISLE LIGHT	
HISTORICAL DOCUMENTATION		ELEVATION & SECTIONS	
DATE	BY	APPROVED	DATE
10/10/77	PWB	[Signature]	5-7-80
DRAWN BY		CHECKED BY	
[Signature]		[Signature]	
SCALE		SCALE	
1/8" = 1'-0"		1/8" = 1'-0"	
SHEET NO.		SHEET NO.	
1		1	

